



Translating Engineering Research to K-8 (TEK8): Building Compelling Bridges to Engineering Careers

Purpose

In the TEK8 program, undergraduate engineering students participate in a research lab experience at OSU. They are then joined by practicing teachers to translate the engineering research experience into a series of mini design challenges that are team-delivered in an after-school program at an urban middle school. The TEK8 and 4-H partnership will permit the design challenges to be captured in a professional, web-ready format that allows them to be adopted by 4-H educators and volunteers.

Impact

Exposes K-8 students to engineering in an authentic way and starts to prepare them for these careers by letting them get hands-on experiences with the design process.



Communicates the societal impact of OSU research to the community, both locally through a direct partnership with local after-school programs, and across the state via a partnership with 4-H.

Prepares both K-8 teachers and 4-H educators, who generally have no formal exposure to engineering, to be able to successfully guide students through open-ended engineering design challenges.

Prepares engineering students to be career ambassadors and effective communicators of their early technical experiences while giving them exposure to university research, potentially interesting them in advanced study/research careers.

Ohio State Colleges/Units Involved

OSU Extension
College of Food, Agricultural, and Environmental Sciences
College of Education and Human Ecology:
Department of Educational Studies
Department of Teaching and Learning
Office of Technology and Enhanced Learning

Community Partners Involved

KIPP Journey Academy

Contact

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<https://engineering.osu.edu/news/2013/11/engineering-new-middle-school-experience>



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